

ecom-D Compact freehand measurement

Thermal printer module or WiFi-connection? Condensate trap or electric gas cooler? Hand-held or compact analysis out of the suitcase? The ecom-D offers a large variety of choice.



100% Calibration



Super-Efficiency



Shock-Proof



Safety First



Wireless Communication



All Inclusive



Cool but Dry



Lotus Effect



ecom-D

Product Features

- Up to 4 gas sensors (Longlife)
- ± 100 hPa differential pressure measurement
- Thermal quick-printer (optional module)
- Soot measurement via soot pump (option)
- Backlit display
- Condensate monitoring
- Professional gas preparation by mini gas cooler equipment (option)
- 3-chamber tubing, coaxial sampling probe
- Special tubing with Teflon sleeve e.g. for NO_x and SO₂ measurements (option)
- T-Room sensor with magnet for easy fixation on metal surfaces
- Integral module for data storage on MM card (card optional)
- Wireless Bluetooth or Wi-Fi data transfer module (option)
- ecom PC software free of charge
- Comprehensive accessory program (remote display, special probes, manual soot pump set...)

Measured values

- O₂ (0-21%)
- CO (0-4000 ppm)
- Gas temperature (0-500°C)
- Air temperature (0-99°C)
- Pressure (± 100 hPa)
- Differential pressure (± 100 hPa)

Options:

- CO extended range (0-10.000 ppm)
- CO% measurement (0-63.000 ppm)
- NO measurement (0-5000 ppm)
- NO₂ measurement (0-1000 ppm)
- SO₂ measurement (0-5000 ppm)
- H₂S measurement (on request)
- Differential temperature

Calculated Values

CO₂, CO (undiluted), NO_x, losses, efficiency (0-120%), dew point, mg/kWh, mg/m³, adjustable O₂ ref.

Display

- LC display, 79 x 53 mm, 240 x 160 dots
- Graphic-capable
- Backlit for optimal reading also in the dark

Sampling Probe

- Sampling probe pistol grip style 250 mm
- Fixation cone
- 3-chamber tubing 2.6 m

Measurement Gas Preparation

- Quick gas transport (measurement values available promptly)
- Condensate trap with filter function
- Electric gas cooler (option)

Operation Safety Features

- Temperature trend indication for core stream search
- CO switch off without measurement interruption by exceeding of pre-set limit value
- Automatic fresh air purging by CO exceeding
- Automatic fresh air purging after measurement
- Optical condensate monitoring with filter function
- Electronic condensate monitoring (option)
- Longlife sensors



NEW: Wireless data transfer via WiFi



NEW: ecom-R remote monitor with data storing / printing capabilities by distance

Printer

- Thermal quick-printer 58 mm (optional module)

Data Processing

- Data logging function
- Data storage on optional MM card (card optional)
- Storage and illustration of disturbance diagnosis data provided via cable connection by ecom-AK read-out head
- Data exchange with ecom PC software EN 50379-2 and 1st BimSchV approved
- Bluetooth or Wi-Fi interface at choice (option)
- Remote data view & saving/printer start via ecom-R (option)

Connections

- Charging connection at analyser
- Multifunctional interface
- USB interface for data transfer

Power Supply

- Battery (Li-Ion) / Mains power
- Including external charger

Transport

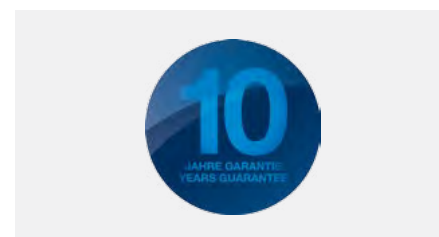
- Hard-shell transport case made out of plastics (accessory)
- Plastics transport case with foam inlets (accessory)

Weight

- Starting by approx. 2 kg (basic version w/o. printer/gas cooler) – depending on selected features

For the perfect measurement of NO_x, SO₂ and other water-soluble gases:

- 100% calibration (climatic chamber)
- lotus effect (special PTFE tubing for gas transport)
- dry cooling (perfect gas preparation via mini Peltier cooler)



EN 50379-2 and 1st BimSchV approved

| Item no. | Description |
|----------|---|
| 103801 | ecom-D Easy With O ₂ & CO (H ₂ -comp.) Longlife sensors; fitted in aluminium housing with high-value pistol grip sampling probe SU (250 mm) D= 10 mm; thermocouple, cone and high-value 3-chamber tubing (2.60 m); high-value T-Gas plug; T-Room sensor with cable, fixation cone & magnet; power pack, automatic CO switch-off and purging (without measurement interruption); optical condensate monitoring; operation manual on USB drive; calibration certificate – issued after 100% calibration in climatic chamber; PC software for data management downloadable free of charge from www.rbr.de |
| 103802 | ecom-D Easy with thermal quick-printer module With O ₂ & CO (H ₂ -comp.) Longlife sensors; fitted in aluminium housing with high-value pistol grip sampling probe SU (250 mm) D= 10 mm; thermocouple, cone and high-value 3-chamber tubing (2.60 m); high-value T-Gas plug; T-Room sensor with cable, fixation cone & magnet; power pack, automatic CO switch-off and purging (without measurement interruption); optical condensate monitoring; thermal quick-printer module; operation manual on USB drive; calibration certificate – issued after 100% calibration in climatic chamber; PC software for data management downloadable free of charge from www.rbr.de |
| 103803 | ecom-D Expert with mini gas cooler, thermal quick-printer module and high-value hardtop transport case (lockable, with inner instrument holding device – see below) With O ₂ , CO (H ₂ -comp.), NO, NO ₂ Longlife sensors; fitted in aluminium housing with high-value pistol grip sampling probe SU (300 mm) D= 10 mm; thermocouple, cone and high-value 3-chamber NO _x tubing (3.50 m); high-value T-Gas plug; T-Room sensor with cable, fixation cone & magnet; power pack, automatic CO switch-off and purging (without measurement interruption); electronic condensate monitoring in mini gas cooler; thermal quick-printer module; operation manual on USB drive; calibration certificate – issued after 100% calibration in climatic chamber; delivered in hard-shell transport case; PC software for data management downloadable free of charge from www.rbr.de |
| 103804 | ecom-D Engine with mini gas cooler, thermal quick-printer module and high-value hardtop transport case (lockable, with inner instrument holding device – see details below) With O ₂ , CO (H ₂ -comp.), NO, NO ₂ Longlife sensors; fitted in aluminium housing with high-value pistol grip sampling probe SU (360 mm) D= 8 mm; thermocouple, cone with mini heat protection shield and high-value 2-chamber NO _x tubing (3.50 m); T-Room stick; high-value T-Gas plug; power pack, automatic CO switch-off and purging (without measurement interruption); electronic condensate monitoring in mini gas cooler; thermal quick-printer module; MM card; USB data cable; operation manual on USB drive; calibration certificate – issued after 100% calibration in climatic chamber; delivered in hard-shell transport case; PC software for data management downloadable free of charge from www.rbr.de |
| 103994 | NO measurement (0-5000 ppm). At choice with our without NO _x calculation. |
| 104112 | NO₂ measurement (0-1000 ppm) Note: NO _x measurement requires each a NO and a NO ₂ sensor. |
| 103767 | SO₂ measurement (0-5000 ppm) Special sampling tubing, for accurate NO _x and SO ₂ measurement. Slim inner diameter – high flow speed; length 3.5 m. a 5 m NO _x tubing (max. length) to fit into hard-shell transport case is available on request. |
| 103902 | CO% measurement (0-63.000 ppm) CO enhanced ppm measurement range (0-10.000 ppm) |
| 104141 | Hardtop plastics transport case with inner holding device for ecom-D compact analyser (all versions) Shock- and impact-absorbing corners, lockable (keys included); inner padded grip in ergonomic design; corner stiffening made out of semi-hard plastics, shock-protective strip. Dimensions: approx. 515 x 325 175 mm (L x D X H) |
| 104142 | Plastics transport case, black with blue folding locks and foam inserts Basic version for ecom-D storage/transport. dimensions: approx.. 530 x 400 120 mm (L x D X H). Not suitable for sampling tubing > 3.5 m and NO _x hoses. |
| 104111 | Tubing for differential pressure measurement (1.5 m) |
| 104115 | ecom-R remote control and monitoring unit - For data view, data remote recording & printout via Bluetooth data transfer (to be ordered separately). LCD display, dim. ca. 70 x 38 mm, backlit, graphic-capable. With rear magnet for fixation on metal surfaces Powered by 2 one-way batteries 1.5 V AA Mignon, incl. protection pouch. Dim.: approx. 145 x 80 x 45 (W x H x D). Also upgradeable on existing analysers. |
| 102469 | MM card, 2 GB - pre-formatted for use with ecom analysers |
| 55818 | Data cable, USB – for connection analyser to PC |
| 104120 | Bluetooth module, for wireless data transfer to PC |
| 104122 | Wi-Fi module, for wireless data transfer to PC resp. mobile end units – more info on www.rbr.de/mobile |
| 101769 | 8-channel analogue output box for external logging/recording units (V / mA), incl. mains power pack, cable to analyser, RS 232 cable and software (download from www.rbr.de) |
| 102888 | T-Room stick - H 28 x Ø 11 mm |
| 102156 | T-Room sensor (PT 2000) with cable 3 m – Range -20 to 100°C; resolution 0,1°C; measurement uncertainty ±1°C |
| 10166 | T-Room probe – Length 260 mm with 3 m cable |
| 12019 | Contact sensor, room temperature (PT 2000), for differential temperature measurement. Range: -20 to 100°C; resolution: 0,1°C measurement uncertainty: ± 1°C; pipe diameter up to: 100 mm; cable length: 3 m |
| 104119 | Heating Check and 4 Pa measurement incl. accessories (capillary hoses, probes for ventilation & surface losses temperature Measurement, incl. magnet fixation) |
| 50538 | Soot pump set - Consisting of soot pump, soot comparison scale, tube of piston grease, socket wrench and 200 soot papers |
| 100965 | Universal CO multi-hole probe – telescopic, 80–280 mm |
| 100943 | Universal O₂ multi-hole probe – telescopic (80-280 mm) with three easily exchangeable sealing plugs for measurement openings from Ø 5 to 25 mm. |
| 100815 | Gas washing bottle for solid combustibles measurement - For pre-filtering of the dust-soiled gas, gas surface widening thru bubble formation and dilution of sensor-damaging organic compounds (mini Peltier cooler compulsory; non-suitable for NO _x resp. SO ₂ measurement) |
| 100813 | Mini filtering plate consisting of water trap, filtering wool cartridge, silica beads cartridge and activated carbon cartridge. Gets hooked at transport case. Incl. connection hoses. |
| 20011620 | Filtering case consisting of water trap, large filtering wool cartridge, large silica beads cartridge, large activated carbon cartridge. Incl. connection hoses. |
| 103575 | Metal filter as probe cap, made out of sintered metal. Suitable for probe tips Ø 8 mm and 10 mm (incl. tensing mechanism and lamping rings to fit the various diameters). External diameter approx. 15 mm, total length approx. 100 mm. |

perfect NO_x
+ SO₂
measurement

ecom-D



ecom-D – Easy (optional with Wi-Fi)



ecom-D with thermal quick-printer module



ecom-D with gas cooler and thermal quick printer (optimal for NO_x/SO_x measurement)



Releasing aid for easy detaching of stable magnet positioning



Free hand thanks to Wi-Fi data transfer
Data transmission and process on smartphone or Laptop/PC (Apps + software free of charge)



Hardtop plastics transport case for ecom-D: The analyser can be operated while in the transport case



Plastics transport case: for ecom-D transport